Appl. No.: 10/797,748 Patent Reply to Office Action of 8/25/2005 51302-00002

Amendments to the Specification:

Please replace paragraphs 0017 and 0041 and the amino acid sequence data that follows the body of each paragraph with the following amended (marked-up) text below:

[0017] In accordance with the teachings of the present invention, novel metal binding proteins are provided. The invention includes at least one substantially purified metal binding protein having an amino acid sequence analogous to at least one metal binding protein sequence from brine shrimp (*Artemia*). A substantially purified metal binding protein can include an amino acid sequence such as:

MET ASP CYS CYS LYS AS[P]N GLY CYS THR CYS ALA PRO AS[P]N CYS LYS CYS ALA LYS ASP CYS LYS CYS CYS LYS GLY CYS GLU CYS LYS SER AS[P]N PRO GLU CYS LYS CYS GLU LYS AS[P]N CYS SER CYS AS[P]N SER CYS GLY CYS HIS STOP [SEQ ID NO: 2]; MET ASP CYS CYS LYS AS[P]N GLY CYS THR CYS ALA PRO AS[P]N CYS LYS CYS ALA LYS ASP CYS LYS CYS [SEQ ID NO: 4];

[0041] A substantially purified metal binding protein in accordance with the teachings of the present invention has an amino acid sequence analogous to:

MET ASP CYS CYS LYS AS[P]N GLY CYS THR CYS ALA PRO AS[P]N CYS LYS CYS ALA LYS ASP CYS LYS CYS CYS LYS GLY CYS GLU CYS LYS SER AS[P]N PRO GLU CYS LYS CYS GLU LYS AS[P]N CYS SER CYS AS[P]N SER CYS GLY CYS HIS STOP [SEQ ID NO: 2].